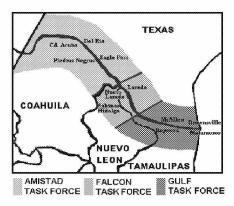
## **BORDER 2020**

# FINAL REPORT ON THE 2013-2014 Action Plan

for the TX-COAH-TAMP-NL Regional Workgroup

December 2014

(original plan published in October 2012)



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

### **Regional Priorities**

- 1. Improve air quality through the following approaches:
  - a. Analyze emissions and emission sources in specific airsheds
  - b. Engage in both road-paving and reforestation (using native species)
  - c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
  - d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
- 2. Improve water quality by taking the following actions:
  - a. Evaluate the portion of the Rio Grande watershed that is in the region
  - b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
  - c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
  - d. Develop more applications for the re-use of water
  - e. Reduce non-native species in the water bodies
  - f. Continue and expand environmental education efforts such as "Adopt the River" and "Day of the River"

- 3. Address problems of improper waste disposal:
  - a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
  - b. Expand environmental education related to waste issues
  - c. Close and remediate open dumps wherever required by regulation
- 4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

#### **Individual Task Force Priorities**

#### Amistad Task Force

- 1. Reduction of energy consumption in buildings and street lighting
- Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
- 3. Construction of sanitary landfills
- 4. Attention to waste disposal in gas drilling operations
- 5. Continuing attention to emergency response
- 6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
- Improvement of vehicle inspection programs in Coahuila
- 8. Joint programs in communication and environmental education, and development of an environmental educators group

#### Falcon Task Force

- 1. Re-use of treated water
- Monitoring of drilling operations in the Eagle Ford Shale
- Finalizing the cross-border contingency plan

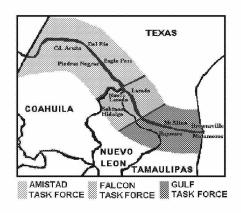
## **Gulf Task Force**

- 1. Improvement of water-related infrastructure, and increased attention to water conservation and re-use
- 2. Increased recycling
- 3. Continuing capacity-building at the local, state, and federal levels of government
- 4. Technical exchanges, including best practices and lessons learned

# Border 2020

# 2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legen	d:
	Activity covers at least two task force areas
	Gulf Task Force
	Falcon Task Force
	Amistad Task Force



Note: This Border 2020 Action Plan does not include infrastructure projects related directly to Border 2020 goals and objectives in air, water, and waste that have been financed in part or in full by the binational North American Development Bank. For information on those projects, see <a href="http://www.nadbank.org/">http://www.nadbank.org/</a>.

# **GOAL # 1: Reduce Air Pollution**

Project # Description of Project	Collaborating Anticipate Organizations d Cost	Source(s) of Points of Contact funding	Progress Towards 2013–2014 Target Target
Objective 1: By 2020, reduce the number of vehi emissions at ports-of-entry through anti-idling at		at do not comply with the respective v	ehicle emissions standards, and reduce vehicle
Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (State of Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ (State of Texas)	Originally SEMA (State of Coahuila); now the municipios  Humberto Fuentes, SEMA/Coahuila, humberto fuentes@coahuila.gob.mx	Inspect 40% of the vehicles in Acuña, progress. Piedras Negras, Monclova, Saltillo, and Ramos Arizpe.  Implementation is in progress. The original commitment was made by a former

Objective	e 5: By 2020, reduce emissions and assoc	iated impacts through	anarmy officie	ancy and/or alter	rativo/rangwahla ang	ray projects	administration in Coahuila: The current administration reports that no state funding is available and all jurisdiction is at the municipal level. Acuña obtained the necessary equipment in late 2014 and will put it to use as soon as possible. Officials in Nava report they are trying to identify funding that will allow the purchase of equipment and initiation of implementation in 2015.
1.5.01	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency.	University of Texas at Austin, LBJ School	\$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.e du	Complete all projects by August 2013.	The LBJ School made grants to six projects, all of which were completed by July 2013. The School issued the RFP in October 2012. An independent committee reviewed twenty-one applications and recommended six projects: two cities, an irrigation district, and three school districts. The University awarded grants to those entities, which subsequently completed their projects by the summer of 2013.
15.02	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila:	Coahuila State Government and BECC	\$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been

	Quantification of the mitigation policies selected in Phase 1.						established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired, and a local coordinator and local experts recruited.
1.5.03	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	\$100,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	Five technical groups began work in July 2012. In 2013-14, the state strategy has been redesigned.  A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA (State of Tamaulipas)		SEMARNAT will seek funds	Delfino Ramirez, SEMARNAT, Delfino.ramirez@se marnat.tamaulipas.g ob.mx	Conduct research and explore business opportunities.	This activity is a subset of project # 1.5.11. See the latter below.
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	SDS (Secretaría de Desarrollo Sustentable de Nuevo León)	\$10,000	Mexican federal funds/CONAC YT	Norma Rangel (SDS, Nuevo León), normaarangel@gmai l.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	Based on information from monitors installed by an independent party, SDS has generated a wind map with data with a resolution of 5 km. In the next stage, they will generate a map with a resolution of 1 km. They expect to have that ready in 2015.

1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo Laredo landfill and burns it to generate electricity for the municipality.	Municipio de Nuevo Laredo and Setasa (Servicios de Tecnología Ambiental S.A.)	\$3.5 million	Private sector; a company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	Sergio Martínez López sergiomartinezlopez @hotmail.com	Have the facility in full operation by the end of 2014.	A feasibility study was completed 2008 with funding from USAID. Issuance of a tender for construction has been pending for several years; the municipio needs to obtain the property title. The project has been put on hold as of fall 2014.
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty, commercial drayage trucks in crossborder trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	\$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@se marnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@h otmail.com	Complete the project by the end of 2014.	The project was completed in 2013.  The study collected information from 456 companies and on 2,756 drayage trucks. Half of the sampled trucks were from model year 2000 or earlier, and 84 percent were model year 2006 or earlier.  A final report summarized the information and offered information on retrofit technologies that could reduce emissions, and a workshop was held in Nuevo Laredo in September 2013.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras- Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@c oahuila.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region	Implementation was begun, but the schedule for completion has been extended by two or more years.

						and Saltillo Region, Coahuila.	In 2013 SEMA began working with local officials to include these projects in the plans of the applicable "Metropolitan Zones". A network will be deployed in Saltillo in 2015 and in Piedras Negras in 2016. With assistance from the
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	\$500,000	SEMA Coahuila	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@se ma.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	BECC, workshops were held in December 2013 in Piedras Negras and Acuña, disseminating information on how public buildings could be made more energy-efficient.  No information is available regarding whether 10 pilot projects are being pursued.
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas .gob.mx	Have a vehicle verification program in the border area of the state by end of 2014.	A pilot program focused on the state-owned fleet was initiated in early 2013. Additional implementation has been put on hold, with the hope that a program for private vehicles can be initiated in 2015.
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA (State of Tamaulipas)	Unknown	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas .gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program.	In October 2014 SEDUMA hosted the Third International Congress on Renewable Energy in Cd. Victoria. The governor established an energy

efficiency was among its charges.  The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of 2015.  The state distributed guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting systems.  In addition, 16	1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA (State of Tamaulipas)	To be SEDUMA, EPA, defined and BECC	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas .gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards.	Eight municipalities have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Nuevo Laredo, Victoria, Mante, Tampico, Madero, and Altamira).
of renewable energy and efficiency was among its charges.  The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of 2015.  The state distributed guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting.							companies set up a trust fund (fideicomiso) to expand renewable energy infrastructure in
of renewable energy and efficiency was among its charges.  The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of							guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting
							of renewable energy and efficiency was among its charges.  The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of

							Currently only three of these have their network in operation (Nuevo Laredo, Victoria, and Tampico).
1.5.13	Implement an environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA (State of Tamaulipas) and municipios	\$ 100,000	SEDUMA, EPA, and COCEF	Ing. Humberto Rene Salinas, seduma@tamaulipas .gob.mx	By 2014, train 100% of the border municipalities.	State authorities trained 16 municipalities from the border region of Tamaulipas and the San Fernando Valley region. The workshop was held in Reynosa, with an attendance of approximately 100 people.
1.5.14	Support the attendance of school district officials from the border region at a statewide conference on energy efficiency.	The TCEQ, the LBJ School of Public Affairs at UT Austin, and border-region school districts	\$ 27,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.e du	Support the attendance of operations staff and board members from nine school districts at the Clean Air through Energy Efficiency conference in November 2014.	In September 2014 the LBJ School of Public Affairs issued a solicitation of interest in September 2014 to 100 school districts in the border region. Seven districts applied and were granted support. One of the seven districts failed to show up at the conference.

# Goal # 2: Improve Access to Clean and Safe Water

Project Description of Project Collaborating Anticipate  # Organizations d Cost	iource(s) f funding Points of Contact 2013-2014 Target	Progress Towards Target
General		
Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.  Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)	-ce I (***********************************	he project was ancelled.

				Water Commission	carlos.avila@sadm.gob. mx		
2.0.02	Organize a "Water Awareness Summit" to educate the public in the Lower Rio Grande Valley about where their water comes from, how the planning process works, what the outlook is, and the importance of conservation.	Texas State Representative Eddie Lucio III, TCEQ, cities and their water utilities, the Rio Grande Regional Water Authority, and the Lower Rio Grande Valley Development Council	\$10,000- 15,000	Local funding efforts/spo nsors	Claudia Lozano (TCEQ) claudia.lozano@treq.te xas.gov	Hold the conference in early 2013.	The first Water Awareness Summit was held in February 2013. More than 200 people attended and expressed interest in making the event annual. A second Summit was held in March 2014, with approximately 300 attendees. A third Summit was held in Dec 2014 with approximately 190 attendees.
2.0.03	Train the staff of small drinking water utilities in Texas' border region in best practices related to compliance with the U.S. Safe Water Drinking Act.	Texas A&M Engineering Extension Service	Less than \$15,000	ЕРА	Bessie Orr Williams (Texas A&MM TEEX), Bessie.Williams@teex.t amu.edu	Hold workshops in three different locations in the Lower Rio Grande Valley in 2014, with at least one workshop in Spanish, and invite Mexican utilities.	The project was completed. Three identical workshops were held on successive days in September 2014 in Rio Grande, McAllen, and South Padre Island, Texas. A total of 68 utility staff persons attended, 20 of them from Mexico. The workshop in McAllen was provided in Spanish. Topics included basic water quality, groundwater production, surface water production, disinfection, and distribution.

2.1.01	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS and SEMA (State of Coahuila)	\$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sem a.gob.mx	Complete the studies by early 2014.	The feasibility studies were completed in 2013. CEAS was then making efforts to implement water management programs in those municipalities. No information has been available since then.
	ve 2: Help drinking water and wastewater efficiency, use water efficiently and adapt to		border region	to implemen	t sustainable infrastructu	re practices to reduce op	perating costs, improve
2.2.01	Provide teacher training workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring Challenge.	Texas Partnership for Water Education (TPWE): EPA, WEAT, TAWWA Scout Troops, ISDs, informal environmental education (EE) providers	Funding needed varies with # of participant s(testing kits \$25/30 individuals / site).	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will identify monitoring site, and sampling results will be submitted to TPWE's WWMC Program Coordinator.	The project was cancelled.
2.2.02 (Sub- obj. 2c)	Promote energy management practices among Texas water and wastewater utilities by conducting quarterly meetings on energy management planning, training on a pumping-system assessment tool, and on-site energy efficiency assessments (key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco, Mercedes, Harlingen, and Brownsville).	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students.	Funding sought: \$75,000/yr or \$150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6, (214) 665- 7501, reazin.david@epa.gov	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, one PSAT training, and two on-site assessments.	A scaled-back project was completed. EPA partnered with the BECC instead of a university to organize a workshop in late September 2014 in Brownsville, Texas.  Besides the Brownsville PUB as host, other participants included the City of Laredo and Laredo Water Utilities, the City of Pharr, the City of San Benito, the East Rio Honda WSC, McAllen Water Utilities, San Antonio Water

							Supply, the City of Weslaco, and Santa Cruz Irrigation District #15. Also in attendance were the Office of the Texas Secretary of State, the Community Resource Group, CPS Energy, and the Texas Water Development Board. Presenters and participants discussed beset energy management practices and exchanged experiences.
2.2.03	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo).	City of Laredo water utility, Webb County, and Nuevo Laredo	\$23,000	EPA border grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshop by the spring of 2013 and then follow-up meetings with utilities to discuss implementation of FOG programs in the summer and fall of 2013.	The project was completed in January 2014. Laredo Utilities organized a binational workshop in March 2013, presenting "best management practices" with regard to management of fats, oils and grease. More than 350 people, including representatives from the maquiladora sector in Nuevo Laredo and restaurants in both cities, attended the event. Laredo Utilities then coordinated two follow-up meetings in August and December 2013, at which participants shared their experience in applying the practices, and also produced a 7-minute

							video about FOG management, for use in education of commercial establishments. Out of 22 establishments that participated in the original workshop, 14 decreased their amount of FOG generation more than 50%.
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	\$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotm ail.com	Organize a workshop or training event(s).	The project was canceled.
2.2.05	Implement a public campaign to increase awareness of problems of non-point-source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	Fifteen cities in the Lower Rio Grande Valley (LRGV) that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	\$40,000	EPA border grant through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Complete the project by the end of 2013.	Workshops were coordinated with the Cities of Harlingen, San Benito, La Feria, Palm Valley, Primera, Weslaco, Donna, Alamo, San Juan, La Joya, Edinburg, Palmview, and Mission. A total of 104 signs were installed by those cities at various locations, and those locations were GPS'd.
2,2,07 (Sub- obj. 2b)	Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	\$5,000,00 0	North American Developme nt Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado— COMAPA) claudialopez@comapan uevolaredo.gob.mx	Complete the project by summer 2013.	BECC certified the project in September 2012, and all work is expected to be completed by January 2015. The objective was to address five sewer collection lines, all with upgrades. Of the five, one of them was been completed by mid-2014 and connected to the

							wastewater treatment system. The remaining four collectors were under repair and still discharging about 1.6 MGD to the stormwater system. Another discharge point from La Joya Creek was identified by COMAPA and will be repaired after an agreement is signed with a private property owner where it is located.
2.2.08 (sub-obj. 2c)	Hold workshops on energy efficiency for water utilities and perform energy audits of the utilities in five municipios in Tamaulipas—Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	BECC and the water utilities in Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	\$250,000	EPA and BECC	Abdias Moreno (BECC), amoreno@cocef,org	Complete the project by 2014.	The project was completed. Workshops were held in 2013, and then final energy audits were presented at a meeting in Matamoros in early July 2014. The audits recommended retrofits requiring a total investment of \$3.7 million, with average payback times of one-two years.
Objective	3: Work binationally to identify and red	uce surface water conta	mination in t	ransboundary	waterbodies or watersh	eds.	
2.3.01	Develop and produce region-specific supplemental materials necessary to produce a Waters to the Sea-Rio Grande module. (Place-based education with comprehensive watershed focus).	Center for Global Environmental Education (CGEE)- Hamline University, Harte Research Institute @ Texas A&M-Corpus Christi, EPA, WEAT, and AWWA	Approx \$100,000 in 2013 \$ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin  Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit and establish an advisory board, produce videos and other materials, identify one or two ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	The project was cancelled.

2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas, which are tributaries to the Rio Grande.	SEMA (State of Coahuila), Municipio de Piedras Negras and Municipio de Acuña	\$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sem a.gob.mx	Begin implementing the campaigns and conclude land conservation agreements by the end of 2014.	SEMA obtained EPA funding through the BECC in spring 2014 to restore and conserve the Arroyo Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin, SEMA and BECC finalized the workplan and are negotiating the quality assurance project plan. In October 2014 in Cd. Acuña SEMA held a ribbon cutting for the Arroyo Las Vacas project and a complementary signing ceremony regarding land conservation. Several entities are collaborating on the development of a similar project for the San Rodrigo river. The projects will promote public awareness and take actions to improve the ecosystems of the arroyo and the river.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA (State of Coahuila), CONANP, Profauna	\$85,000	SEMA (Coahuila), CONANP, Profauna – and will seek other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sem a.gob.mx	By the end of 2014, increase the activities of the invasive species plant removal program in the Rio Grande on the border of Coahuila.	No progress yet had been made by mid- 2013. No information has been available since then.

2.3.05	Organize a regional workshop to disseminate "best practices" related to water conservation policy, programs (such as EPA's Water Sense), and public education, and implement enhanced programs in at least one pair of sister cities.	City of Laredo, EPA, TCEQ, TX Water Development Board, Piedras Negras Technological Institute	\$6,000	City of Laredo, EPA, TCEQ, and local sponsors	Miguel A. Pescador mpescador@ci.laredo.t x.us  Debora Browning EPA, Region 6 browning.debora@epa. gov	Hold a regional workshop in Laredo by spring 2013, and implement a new campaign in two sister cities by 2014. Enlist 10 new WaterSense Partners.	A day-long workshop was organized and hosted by Laredo in March 2013. More than 100 persons attended from both sides of the border, including Texas and Tamaulipas state agencies, and discussed conservation strategies. No new WaterSense Partners had been added by mid-2014 as a result of the workshop.
2.3.06 (Sub-Obj. 3a)	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly holligan@tceq.tex as.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and EPA staff. In July 2014 TCEQ began taking water samples in the target stretch of the Rio Grande for analysis. Mexican partners have not yet set a date for their sampling.

**Goal # 3: Promote Materials Management, Waste Management and Clean Sites** 

	Description of Project	Collaborating Organizations	Anticipated Cost	Soprag(s) of tending		2013-2014 Target	Progress Towards Target
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulip as and state agencies in Tamaulipas, Nuevo León, and Coahuila	Unknown	SEMARNA T	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarna t.tamaulipas.gob.mx  Lic. Alejandro Manriquez Ramirez (SEMARNAT/Coahuila), educacion@coahuila.sem arnat.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in Coahuila. No information is available from Nuevo León. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros. SEMARNAT Coahuila has certified one school in Cd. Acuña for the program.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	\$10,000	Lower Rio Grande Valley Developm ent Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	Cameron County and the Valley Proud Environmental Council engaged in a media campaign against illegal dumping, using billboards and newspapers throughout the Lower Rio Grande Valley. The two entities received numerous phone calls during the campaign,

3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	Lower Rio Grande Valley Developm ent Council, TCEQ, and individual local governme nt	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org (956) 682-3481	Finish the five separate but related projects by the end of 2013.	expressing concern about the trash that they had seen dumped throughout the valley.  All cities except one completed their projects (Bayview cancelled its activity). The cities expanded and enhanced their recycling capabilities at their recycling capabilities at their recycling trailers, forklifts, and other equipment. Also, Pharr has introduced Curby the recycling robot in outreach activities.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio of Nuevo Laredo	The City of Laredo Environme ntal Services local partners, and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), Inava1@ci.laredo.tx.us	Establish an organization in 2013 in Nuevo Laredo and affiliate with Keep America by the end of 2014.	The project's objectives are expected to be fully completed in early 2015. Reciclado en Acción/Fundación Verde was established in 2013, and initiated environmental awareness events in Nuevo Laredo. The City of Laredo Environmental Services will be covering the membership fees (about \$6,000) for the organization to be affiliated with Keep America Beautiful.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public	Municipio de Nuevo Laredo Unknown	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program)	Install the bins at all elementary schools in 2013 and start relevant	The project was completed. Bins were installed in elementary schools and

	bins in parks, to include all elementary schools in Nuevo Laredo.				valencia osvaldo@hotma il.com	environmental education programs for students.	environmental education conferences were resumed at the schools in February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA (State of Tamaulipas)	\$ 300,000	EPA/SEDU MA/SEMA RNAT	Dr. Silvia Casas (SEDUMA), silvia.casas757@gmail .com	Reach out to 100% of the border cities.	This project was re- numbered and is now #6.0.07
3.1.09	Redesign and extend coverage of the <i>E-Conexion</i> newsletter as a strategy to share best practices.	SEDUMA (State of Tamaulipas)	\$ 30,000	SEDUMA	Dra. Silvia Casas (SEDUMA), silviacasas757@gmail. com	Extend the dissemination of <i>E-Conexion</i> to 100% of the Tamaulipas municipalities.	SEDUMA expanded the electronic distribution to include 43 municipalities, all their state offices, environmentally certified schools (SIMA-E), and private industry. To save paper and ink, SEDUMA no longer prints and distributes hard copies. Minor changes were made to the design and the use of background colors is minimized.
3.1.10	Organize a visit to Austin, TX by private and public sector Mexican waste management specialists to see a model sanitary landfill and municipal recycling operation	Red Ambiental (headquartered in Monterrey, Nuevo León) Secretariat for Sustainable Development (State of Nuevo León), and the TCEQ (State of Texas)	Unknown	Red Ambiental	Eddie Moderow (TCEQ), eddie.moderow@tceq.tex as.gov	Organize the visit for October 2014.	The project was completed. The visiting group included fourteen public- and private-sector officials from six Mexican states. They spent two days in Austin in October, talking with Austin City officials and TCEQ staff, and visiting the Texas Disposal Systems landfill in Creedmore and the

							Balcones Resources' recycling facility in Austin.
Objectiv 3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat (State of Nuevo León), and TCEQ (State of Texas)	\$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.co m	Survey border municipalities on both sides of the border, prepare a "best practices" manual, and perhaps hold a regional workshop	The project was completed in 2013.  SDS surveyed more than 20 local governments on both sides of the border and then developed a manual for local governments on best practices for scrap-tire management. With this manual as the focus, SDS collaborated with the TCEQ to organize a binational workshop held in March 2013.  Representatives of 10 local governments plus state and federal governments, as well as private industry, attended the workshop.
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	SDS (Nuevo León), SEMARNAT, and Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds \$67,000	Municipio of Sabinas Hidalgo, Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.co <u>m</u> y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	This particular project has been cancelled and replaced by a related but different project in the same municipio. See project # 3.2.08 below.
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville (TAMUK)	\$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Through a demonstration project, assist communities in building capacity for	With the grant funds available, TAMUK managed a demonstration project that baled

					scrap-tire management.	approximately 62,500 scrap tires (625 bales) and used 125 of the bales as part of the subbase of a section of a landfill road bed in Brownsville. TAMUK is looking for an additional \$15-20K to use the remaining 500 bales and complete the extension of the road.
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado— COMAPA) carlosmontielsaeb@hot mail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Significant progress was made.  By mid-2013 compost was being generated by COMAPA and applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center. The utility subsequently began distributing compost to schools for landscaping and gardening and also uses it at COMAPA facilities.  COMAPA uses 5 to 10% of all the bio solids generated at the wastewater treatment plant for the compost. In 2015 the utility expects to sign an agreement with the municipio to purchase equipment that will enable generation of more compost, and

							then begin selling it to commercial establishments and businesses.
3.2.05	Implement a collection and management program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	\$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotma il.com	The program will be in full operation by spring 2013.	The program was in full operation in 2013, after the first steps had been taken in August 2012. In 2013, the city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap-tire management program that includes valuation.	SEDUMA (Tamaulipas)	\$ 400,000	SEDUMA/S EMARNAT /EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.go <u>b.mx</u>	Develop public policy and a management plan for scrap tires	The project is on hold.
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA (Tamaulipas)	\$ 300,000	SEDUMA/E PA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.go b.mx	Complete action plan	The project is on hold.
3.2.08	Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León.	SDS (Nuevo León) and Municipio of Sabinas Hidalgo, Nuevo León	\$25,156	BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.co <u>m</u> y chel1977@live.com.mx	Complete the study by 2015.	[This project is a replacement for project # 3.2.02, and was not initiated until mid-2014.] By the end of 2014, the study was 35% completed.

ojective 3: By 2020, improve knowledge in eve	y level of government freue	rai, state, local	) to characte	The and remediate contains	iaccu sices.	
Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMA (State of Coahuila)	\$300,000	SEMA	Maria Teresa Molina, Municipio de Pledras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road	Prior to 2012, 19.7 acres of the 30-acre had been remediate Piedras Negras has i responded to inquir

						extension to and a green area at the site.	about the project during 2013 and 2014.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	\$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.u §	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city will seek assistance through the TCEQ's Brownfields Site Assessments Program to determine whether the site meets the federal definition of a brownfields site and is eligible for funding under the EPA's brownfields program.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA (State of Coahuila), Municipio de Piedras Negras	\$400,000	SEMA	Miguel Angel Leal (miguel.leal@sema.gob .mx)	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scraptires. No information has been available since then.

# **Goal #4: Enhance Joint Preparedness for Environmental Response**

Project # Description of Project	Collaborating Anticipate Source(s) of Organizations d Cost funding	Points of Contact 2013-2014 Target Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister training, risk analysis, and/or capacity building.	city joint contingency plans will be supplemented	with preparedness and prevention related activities such as certified
Develop an emergency response plan for 4.2.01 the maquiladoras in Brecha E-99 in Reynosa, Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park  EPA border grant through the BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@l andisgyr.com The project was canceled.

4.2.02	Hold a second "knowledge exchange" on risk mapping for first responders on both sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs.	Mutual Aid Committee)  Fire departments from Texas and Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, and Civil Protección for both Tamaulipas and Mexico	Unknown	EPA and NORTHCOM	Paige Delgado (EPA),  Delgado.paige@epa.g  ov  EPA Region 6	Hold the exchange during the first half of 2013	A first exchange was held in July 2012. The project is on hold because of the uncertainty of funding from NORTHCOM.
4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	\$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevola redo@hotmail.com or ernestorivera5775@h otmail.com	Hold the exercise after the U.S. and Mexican governments have approved permits that allow hazardous waste to be transported on this bridge.	The project is in progress. The U.S. Department of State issued a "presidential permit" in May 2014 to allow the crossing of hazardous materials. The Mexican government is awaiting the completion of a water quality study on the Rio Grande that CONAGUA required before the permit is issued. If and when a Mexican permit is issued and both nations sign diplomatic notes, local officials will organize a binational exercise.
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	\$5,000 - will be looking for funders	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León), jorge,camacho@nuev oleon.gob.mx	Add the Solidarity Bridge, which is upstream from Laredo and Nuevo Laredo, to the Joint Contingency Plan for Laredo and Nuevo Laredo by the end of 2013.	See the following project (4.2.05).

4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevola redo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re- visit the language of the draft revision and possibly develop alternative language.	The project is on hold. Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and Consultoria y Servicios en Seguridad Industrial y Medio Ambiente S.A. de C.V	\$130,000	EPA border grant through the BECC	Briselda Duarte (Border Environment Cooperation Commission), bduarte@cocef.org and M.C. Mónica de Jesús Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)	Complete new plans by the end of 2013.	Begun in 2012, the project was completed by the end of 2013.  Under contract from the BECC, two workshops were organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks.  After delays and the hiring of a new contractor, additional

workshops were held in
July 2013. In November
of that year, the two
sister-city pairs each
signed a Memorandum
of Cooperation for new
cross-border
contingency plans.
Each community
committed to providing
resources and mutual
aid in case of chemical
accidents.

# **Multi-Goal Projects**

	Description of Project	Collaborating Organizations	Assissa		Points of Contact	2016-2014 Target	Progress Towards Target
Projects	potentially related to some $\underline{\text{combination}}$ of a	ir quality, water qua	lity, water co	nservation, or w	aste management		
							The project was fully implemented in 2013.
6.0.01	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust.	The University of Texas Health Science Center in San Antonio	\$50,000	EPA border grant through the BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or <u>steer@uthscsa.edu</u>	Complete the project by the end of 2013.	Two training sessions were held for 40 promotoras (lay healthcare workers)—20 from in the N. Laredo/ Laredo area and 20 from the Cameron County and adjoining municipios in Tamaulipas. The classes covered 17 types of potentially hazardous exposures during pregnancy and childhood, and how to avoid these exposures. Subsequent to the training, the

							promotoras provided outreach to 400 pregnant women or mothers with young children in a threemonth period. Each of those families made an oral commitment to discuss lessons learned with two other families.
6.0.02	Conduct educational workshops/plays on the safe handling and disposal of pesticides for farm workers in the Lower Rio Grande Valley of Texas and in the Laredo area.	Migrants in Action – Weslaco, Texas	\$20,000	EPA border grant through the BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), nochoa@yahoo.com	Produce the EPA-written play "El Moscas y los Pesticidas" using students in two cities in the first half of 2013	The project was completed in 2013 Student groups in Laredo and Edinburg performed the play before more than 2,000 people.
6.0.03	Develop of a binational repository of databases on environmental stresses and public health effects.	Texas A&M Health Science Center, School of Rural Public Health, PAHO, BECC, HIDA- REY COBINA, Hidalgo County Health Dept.	\$50,000	EPA border grant through the BECC	Genny Carrillo (Texas A&M Health Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc .edu	Review the literature, build a cross-border partnership of professionals at the local, state, and national levels, identify health hazards in the environment and relevant indicators, and build a binational repository of databases by the end of 2013.	Project staff accomplished as much as possible during the grant period, but encountered unanticipated difficulties with selected objectives. The project reviewed literature, and talked with health professionals on the U.S. side, and established a repository of U.S. databases. The project made contact with professionals in Mexico but had difficulty finding relevant databases on that side of the border that were not outdated. The project also discovered that the

							Mexican professionals use different parameters than are used in the United States.
6.0.04	Address children's environmental health issues in Laredo, Texas and Webb County by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians.	Laredo Health Department	\$50,000	EPA border grant through the BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.u S	Complete the project by the end of 2013.	Laredo completed the project by the end of 2013.  Project staff surveyed the use of pesticides and household hazardous materials in more than 135 homes.  More than 50 physicians and health providers were trained on diagnosing illnesses related to pesticide exposure through the use of a web-based diagnostic tool, allowing them to assist survey respondents with symptoms related to pesticide exposure.  Staff distributed publications on lead and pesticides to over 120 homes.
6.0.05	Organize annual Environmental Summits for the public in the Lower Rio Grande Valley, in cooperation with State Representative Eddie Lucio III's office.	TCEQ, and cities in the Lower Rio Grande Valley	\$15,000	Local sponsors, EPA	Imelda Pena, TCEQ Imelda pena@tceq.tex as.gov	Hold Environmental Summits in the fall of 2013 and in the fall of 2014.	The fourth annual Valley Environmental Summit was held in October 2013. An estimated 300 people attended. Their priority interests were illegal dumping, marine debris, and community cleanup programs. The fifth summit was held in October 2014 with

							approximately 350 attendees. The topics of interest were sustainability, local enforcement programs and household hazardous waste programs.
6.0.06	Organize annual Environmental Summits for the public in Webb County, in cooperation with State Senator Judith Zaffirini's office.	TCEQ and the City of Laredo	\$15,000	Local sponsors, EPA	Carmen Ramirez, TCEQ, carmen.ramirez@tceq texas.gov	Hold Environmental Summits in the fall of 2013 and 2014.	Environmental Summits were held in Laredo in October 2013 and November 2014. These were the fourth and fifth in an annual series. The 2013 Summit had more than 400 attendees. Speakers discussed recycling, energy efficiency, and water conservation. The 2014 Summit had a theme of "Focus on Nature" and targetted high school students, who comprised a majority of the 325 attendees. Topics included weather preparedness and energy efficiency. There were also hands-on activities on building a natural habitat and sampling water quality parameters.
6.0.07 (forme rly 3.1.08)	Extend Tamaulipas' state program in promoting environmental management systems (SIMA) to more schools and government offices.	SEDUMA (State of Tamaulipas)	\$ 300,000	EPA/SEDUM A/SEMARNA T	Dra. Silvia Casas (SEDUMA), silvia.casas757@g mail.com	Reach out to 100% of the border cities.	SEDUMA made significant progress in expanding the use of its guidelines for environmental

	management programs.
	SIMA's educational
	division enrolled more
	than 90 schools in
	Matamoros, Tampico,
	and Victoria. Each
	school held workshops
	on water, waste, and
	energy efficiency,
	reaching a total of
	26,000 students. The
	schools also received
	equipment such as low-
	flow water toilets,
	recycling containers,
	and energy-efficient light bulbs.
	HEITE DUIDS.
	SIMA's institutional
	division trained more
	than 1,800 state
	employees in water
	conservation, energy
	efficiency, and
	recycling. State offices
	received water filters
	and energy-efficient
	light bulbs and reduced
	energy costs 13.03%
	from January to August
	2014. Tamaulipas will expand both programs
	to more schools and
	state offices in 2015.
	state UHICES III 2013.